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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,759	07/08/2003		Joseph W. Schaffer	SCHA3004/FJD	6109
23364	7590	09/12/2005		EXAMINER	
BACON & 625 SLATE		•	THOMPSON, JEWEL VERGIE		
FOURTH FI				ART UNIT	PAPER NUMBER
ALEXANDI	RIA, VA	22314	2855		

DATE MAILED: 09/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)					
		10/614,759	SCHAFFER ET AL.	(ber				
	Office Action Summary	Examiner	Art Unit					
		Jewel V. Thompson	2855					
Period fo	The MAILING DATE of this communication ap or Reply	pears on the cover sheet with the	correspondence address -					
WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPL CHEVER IS LONGER, FROM THE MAILING D nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. In period for reply is specified above, the maximum statutory period are to reply within the set or extended period for reply will, by statute treply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATIO 136(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. mely filed the mailing date of this communica ED (35 U.S.C. § 133).					
Status								
1)	Responsive to communication(s) filed on							
•		— s action is non-final.						
3)	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
,—	closed in accordance with the practice under							
Dispositi	ion of Claims							
4)🛛	Claim(s) 1-4,6 and 8 is/are pending in the app	lication.						
•	4a) Of the above claim(s) <u>5 and 7</u> is/are withdrawn from consideration.							
5)	Claim(s) is/are allowed.							
6)🖂	Claim(s) <u>1-4,6 and 8</u> is/are rejected.							
7)	Claim(s) is/are objected to.							
· ·	Claim(s) are subject to restriction and/o	or election requirement.						
Applicati	ion Papers							
9)	The specification is objected to by the Examine	er.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.								
,	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
	Replacement drawing sheet(s) including the correct			1(d).				
11)	The oath or declaration is objected to by the E							
Priority (	ınder 35 U.S.C. § 119							
, —	Acknowledgment is made of a claim for foreigr ☐ All b) ☐ Some * c) ☐ None of:	n priority under 35 U.S.C. § 119(a	a)-(d) or (f).					
	1. Certified copies of the priority documen	ts have been received.						
	2. Certified copies of the priority documen							
	3. Copies of the certified copies of the price	•	ed in this National Stage					
	application from the International Burea							
* 5	See the attached detailed Office action for a list	t of the certified copies not receive	ed.					
Attachmen								
	e of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948)	4) Ll Interview Summan Paper No(s)/Mail D						
3) Infor	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 or No(s)/Mail Date		Patent Application (PTO-152)					

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Vander Heyden (4,663,977).

Regarding claims 1 and 6, Vander Heyden teaches a flow meter, comprising: a primary flow sensor (1,2); sensor electronics (fig. 1) connected to the primary flow sensor for proving a measurement signal; a signal processing unit (16) connected to the sensor electronics for determining the flow, the signal processing unit (16) being set to produce a signal proportional to the flow rate or the square of the flow rate (col. 13, lines 55-58); and an output signal generator (12) for generating an output signal proportional to the signal of the signal processing unit (col. 9, lines 23-24).

Regarding claim 3, Heyden teaches the primary flow sensor includes two ultrasonic transducers (1 and 2) serving as transmitters and receivers (col. 6, lines 35-38).

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### Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2, 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vander Heyden in view of Fletcher-Haynes (5,831,175).

Regarding claims 2 and 8, Vander Heyden fails to teach a communication interface, allowing a user to set the output signal to be proportional to the flow rate or the square of the flow rate. Fletcher-Haynes teaches a flow meter equipped with a suitable data input device, a keyboard (16). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to have used the keyboard of Fletcher-Haynes in the flow meter of Vander Heyden for the purpose of being supplied with user selectable constants and mode control commands (col. 8, lines 52-55, Fletcher-Haynes)

Regarding claim 4, Vander Heyden fails to explicitly teach the output signal generator comprises part of the signal-processing unit. However the signal processor (16) is part of the entire system. It would have been obvious to one of ordinary skill in that art at the time that the invention was made to have known that the generator of

Vander Heyden is a part of the signal processor for the purpose of determining the sonic velocity from the signals generated from the generator (abstract, Vander Heyden)

### Response to Arguments

3. Applicant's arguments filed August 18, 2005 have been fully considered but they are not persuasive.

**Applicant argues** there is absolutely no teaching that the signal is proportional to the square of the flow rate

**Examiner disagrees**. However, what is actually claimed is "...a signal proportional to the flow rate **or** the square of the flow rate;". The cited reference teaches "...a signal proportional to the flow rate;"

#### Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jewel V. Thompson whose telephone number is 571-272-2189. The examiner can normally be reached on 7-4:30, off alternate Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 7, 2005

EDWARD LEFKOWITZ SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2800